EXHIBIT Z

"A mind-blowing tour de force that unwraps the myriad objects of addiction surrounding us. This intelligent, incisive, and sometimes grimly entertaining book will become the standard work on the subject."

—Rod Phillips, author of *Alcohol: A History*

"This important study of the accelerating 'weaponization' of pleasure is compulsory reading for anyone wondering how addiction became the foremost public health problem worldwide. Intensely readable, and a sobering reminder of our vulnerability to bondage marketed as liberation."

—Deborah Rudacille, author of *The Riddle of Gender*

"The delight I took in reading this book can best be expressed by saying I read it end-to-end in two sittings and might have done it in one if life hadn't intruded. Courtwright's erudition is astonishing, and his wit makes the book fun to read as well as informative."

—Keith Humphreys, author of *Circles of Recovery*

"Is limbic capitalism the tail that wags the dog? Is it a vital cog in a more complex machine? Courtwright offers a powerful history of the changing forms of pleasure and addiction over human history. A bold and fascinating book, sure to generate much discussion."

—Daniel Lord Smail, author of *On Deep History and the Brain*

"A rich and rewarding book. Alcohol, tobacco, drugs, commercialized food, gambling, and the internet lean toward addiction, rooted in pleasure centers in the brain. Courtwright shows how capitalism supplies those desires at an often frightful price."

—William Rorabaugh, author of *Prohibition: A Concise History*

"Compelling and ingenious, this book deals the reader into a reality game where the crafty biology of pleasure meets what Courtwright calls limbic capitalism. No one's leveling up in this high-stakes game. The question is how you play, whether you can stop, and what happens when you do."

—Nancy D. Campbell, author of *Discovering Addiction*

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HOW BAD HABITS BECAME BIG BUSINESS

of those dollars, it spent $50 promoting its products. The company report that broke down the numbers promised that management's every action was "guided by one overriding objective—enhancing shareholder value." It was true. That 2 percent was money well spent to polish the corporate image and deflect political heat.[16]

There are many ways to buy protection. They are obvious in high-risk, high-profit illegal enterprises, where bribes and violence are routine. *Plata o plomo,* silver or lead, as the narcos like to say. Easier to miss are the legal forms of inducement in limbic capitalism's licit branches.

The best example is charity, the oldest form of money laundering. Remember the Garden of Grand Vision, the Harbin vice district where garbage men collected dead addicts with a fishing spear? One of the Garden's most notorious slumlords, Zou Xisan, also directed the Harbin Morals Society, to which he contributed monthly. When the police chief asked him if he did not think it wrong to simultaneously profit from his den of iniquity, Zou replied, "I give alms to people of the world, so I am not concerned."[17]

Charitable recycling sanitizes vice. Even China's communist government, which rounded up and shot the Zous of the world, eventually authorized lotteries for sports and welfare programs. Lotteries were cleaner than casinos, and gave the punters a chance to scratch their gambling itch. Lesser-evil thinking spread. In 1994 the British government set up the Heritage Lottery Fund. It kept museums, cathedrals, and parks open and the tourist economy humming. A disguised regressive tax became a social win.[18]

What about the Quaker chocolatiers? The Cadburys may have rotted the imperial teeth. But they were true philanthropists.

So were Victorian-era brewers like J. C. and Carl Jacobsen. J. C. made a fortune producing high-quality lager in a brewery outside of Copenhagen. He preached moderation and promoted good beer as a salubrious alternative to spirits. He established the Carlsberg Foundation, which later merged with his son and rival Carl's Ny Carlsberg Foundation. Neither man was duplicitous in his giving. Neither promoted vice, judged by prevailing Danish standards. Yet their philanthropic legacy remained a public relations temptation, the more so as the company prospered internationally. The Carlsberg Foundation was not shy about linking its world-class art and research programs to the Carlsberg Group's world-class sales.[19]

Carlsberg, though, was a model of propriety compared with Purdue Pharma. Purdue's modern history began in 1952, when three New York City physician brothers, Arthur, Mortimer, and Raymond Sackler, acquired Purdue Frederick, a small pharmaceutical company. The Sacklers and their successors built sales in the United States and later overseas through a network of companies called Mundipharma—literally, "drug world." The formula was simple: Push the product and spread the wealth. They hired lobbyists, paid medical opinion leaders, and marketed drugs to likely physician-prescribers whom they showered with meals and conference trips and company-backed research for new drugs. Among these were narcotics for chronic pain patients.

The label "patient" is important. Street addicts were not sympathetic. Patients suffering from chronic diseases were. Helping them, or purporting to help them, was the surest way to avoid strict regulation or prohibition. The same thing was happening, at the same time, with medical marijuana. Why outlaw a therapy that could benefit AIDS and cancer patients battling weight loss and nausea? Few could object to such humanitarian ends, though cannabis distributors coveted more than sales to the terminally ill.

Purdue's executives faced a similar temptation. During the 1980s and 1990s, they increasingly focused on selling narcotics for pain relief. They marketed MS Contin, a timed-release morphine pill, and then OxyContin, a timed-release oxycodone pill that packed a heroin-like punch. Most of the MS Contin went to cancer patients. But Purdue coveted the much larger noncancer pain market. In late 1995 the FDA, lobbied by Purdue, granted approval to prescribe OxyContin for moderate-to-severe pain lasting for more than a few days. The company immediately went prospecting for receptive practitioners and, through them, the pay dirt of opioid-naïve patients suffering from common complaints like arthritis and back pain. Most side effects, Purdue promised, would quickly diminish. Its pills would provide

"smooth and continuous" pain relief. There was no need to worry about "iatrogenic 'addiction' to opioids legitimately used in the management of pain," as the condition was "very rare."[20]

Except that it was not rare. During the early 2000s the overprescribing of OxyContin triggered a sharp rise in opioid abuse and addiction and an increased demand for narcotics. Other suppliers, legal and illegal, jumped in. Pharmaceutical manufacturers and distributors kept the pill mills stocked, turning them into regional distribution hubs. Patients learned to work the system. They shopped doctors, filled prescriptions, sold pills for many times their copays. When the pills got pricey, Mexican traffickers, who had been organizing their own distribution network, competed with high-quality heroin. They later added fentanyl, a powerful opioid that could be synthesized anywhere and smuggled with ease. But Purdue got the ball rolling, and the ensuing epidemic of addiction and overdose was catastrophic. By 2016 and 2017 overdose deaths were causing a decline in U.S. life expectancy. It was the first two-year drop since the lethal flu epidemics of 1962 and 1963.[21]

Meanwhile the Sacklers and their heirs made sure to spread the profits. They founded research institutes, professorships, and lecture series at name-brand universities. They built new museums from Harvard to Beijing. They expanded old ones from New York to Paris. The donations won the family decades of prestige and good will, until the opioid addiction debacle became too big to conceal. Allen Frances, a psychiatry professor, told a reporter that he had spent a career making presentations in Sackler-this and Sackler-that lecture halls. He thought the name a synonym for good works tithed from capitalist bounty. Then it dawned on him that the family had earned its fortune through mass addiction. "It's shocking," he said, "how they have gotten away with it."[22]

Shocking, but also part of a pattern. The tobacco tycoon who endowed a university: James Duke. The narco who built soccer fields for poor kids: Pablo Escobar. The casino magnate who funded Zionist causes and cancer research: Sheldon Adelson. The Pharma family who added wings to museums: the Sacklers. Licit or illicit—not a hard-and-fast distinction—limbic capitalists created community stakeholders as well as community losers. When you

catch whales—the gambling term Purdue executives used for their heaviest-prescribing doctors—lots of people get a cut of the oil and blubber.[23]

Limbic capitalism's beneficiaries are not always the intended ones. Private equity firms, for example, had nothing to do with the opioid addiction epidemic. Yet from 2011 through 2016 they invested over $5 billion in private drug treatment facilities in order to capitalize on all the new addicts. That is another reason limbic capitalism is a self-sustaining system, rather than a loose alliance of plotters. Engineered excess creates stakeholders by creating externalities, side effects not reflected in the actual price of the product or the balance sheet of the supplier. In the United States, nearly two thirds of drivers aged eighteen to twenty-nine have admitted to texting while driving. After 2011 the total number of crashes, which had been declining for years, began rising. Auto insurance bills rose too. Drivers lost money, though not smartphone makers.[24]

Suckerfish ride the sharks of limbic capitalism. Many suckerfish, in many shapes and sizes. Think of hiring officers. For them any type of excessive consumption or addiction is a useful marker. Useful in the sense that it offers clues to class, character, and stress—and to intelligence, which is positively associated with impulse control. It simplifies their decision making and avoids future losses. Statistically, smokers, compulsive snackers, insomniac gamers, and positive drug-testers are poor hiring bets.

Maybe in the abstract. But how much do employers actually save by shunning casualties of limbic capitalism?

It is hard to say in the aggregate, though individual studies point to considerable savings. Counting smoking breaks, added health-care costs, missed days, and reduced productivity, minus the "benefit" of smaller retirement outlays due to early death, each smoker costs private employers in the United States an average of about $6,000 a year. Each screened-out smoker therefore saves $6,000 a year. That figure is lower for countries with less costly health care. But nobody makes money for the boss when they are smoking on the loading dock or home sick with bronchitis.[25]